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| 09/840,922      | 04/25/2001  | Jeremy S. Cooper     | 2018.0070001        | 6528             |

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STERNE, KESSLER, GOLDSTEIN & FOX PLLC  
1100 NEW YORK AVENUE, N.W.  
WASHINGTON, DC 20005

EXAMINER

TO, BAOQUOC N

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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2172

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DATE MAILED: 07/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/840,922

Applicant(s)

COOPER, JEREMY S.

Examiner

Baoquoc N To

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. Claims 1-31 are pending in this application.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-12 and 15-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koizumi (US. Patent No. 6,462,676).

Regarding on claims 1, 15 and 27, Koizumi teach a method of performing a proximity search, comprising the steps of:

(a) receiving a proximity parameter defining a search area encompassing a predetermined position (search range) (col. 9, lines 28-39); and

(c) comparing (compare before extract) the set of latitudes and longitudes to position field information in a plurality of records stored in a database (col. 9, lines 40-43 and col. 8, lines 28-30).

Koizumi does not explicitly teach (b) calculating a set of latitudes and longitudes approximating the search area based on the proximity parameter. However, Koizumi teaches, "calculating an absolute position (i.e., the latitude and longitude) of the portable terminal 29 by using the electronic waves from the artificial satellites for the positional measurement" (col. 6, lines 30-37). This teaches calculating the latitudes and

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longitudes for the position or location of the user request. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to include calculating the latitudes and longitudes position in order to retrieve the map direction to locate the user requested location.

Regarding on claims 2, 16 and 28, Koizumi teaches determining which of the plurality of records include position information within the search area base on step (c) (col. 7, lines 40-46).

Regarding on claims 3, 17 and 29, Koizumi teaches the proximity parameter is a search radius defining a circular search area center around the predetermined position, and wherein step (b) further comprises the step of calculating the set of latitudes and longitudes to define a smallest square search area into which the circular search area can fit (col. 6, lines 29-37).

Regarding on claims 4, 18 and 30, Koizumi teaches the position information in each of the plurality of records includes a latitude and a longitude associated with a position (col. 6, lines 29-37), and

Wherein the smallest square search area covers a latitude range and a longitude range corresponding respectively to a height and a width of the square each corresponding to a distance equal to at least twice the proximity parameter (col. 6, lines 29-37), and

Wherein step (c) comprises respectively comparing the latitude and longitude associated with each of the plurality of records to the latitude and longitude ranges covered by the smallest square search area to determine which of the plurality of records include position information within the square search area (col. 9, lines 40-43 and col. 8, lines 28-30).

Regarding on claims 5, 19 and 31, Koizumi teaches calculating respective latitudes and longitudes of a least first, second, and third corner of the square area, wherein the latitude range extends between the latitude of the first and second corners and the longitude range extends between the longitudes of the second and third corners of the square area (calculating longitudes and latitudes) (col. 6, lines 30-38).

Regarding in claims 6 and 20, Koizumi teaches calculating latitudes and longitudes of at least the first, second, and third corners of the square area, wherein the first, second, and third corners of the square area, wherein the first and second corner are at the same longitude but different latitudes and the second and third corners are at the same latitude but different longitudes (col. 6, lines 30-38).

Regarding in claims 7 and 21, Koizumi teaches calculating an angular width of the square area, the angular width being subtended by at least the width of the square area (col. 6, lines 30-36); and

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Calculating an angular height of the square area, the angular height being subtended by at least the height of the square area (col. 6, lines 30-36).

Regarding on claims 8 and 22, Koizumi teaches predetermined position has a latitude and a longitude, and wherein the step (b) further comprises the steps of:

Calculating (calculating) respective latitudes for the first, second and third corners using the predetermined position latitude and the angular height of the square area; and

Calculating (calculating) respective longitudes for the first, second and third corner using the predetermined position longitude and the angular width of the square area (col. 6, lines 30-36).

Regarding on claims 9 and 23, Koizumi teaches step (a) comprises the step of receiving an information request associated with the predetermined position and the proximity parameter (col. 9, lines 28-33).

Regarding on claims 10 and 24, Koizumi teaches (e) sending a search result based on the records associated with position information determined to be within the square area at step (c), to fulfill the information request (col. 9, lines 40-46).

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Regarding on claims 11 and 25, Koizumi teaches step (b) further comprises calculating the circular and the square search areas using non-planar geometry (col. 6, lines 30-38).

Regarding on claims 12 and 26, Koizumi teaches step (b) further comprises calculating the circular and the square search areas using planer geometry (col. 6, lines 30-38).

3. Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koizumi (US. Patent No. 6,462,676) in view of Ito et al. (US. Patent No. 5,908,465).

Regarding on claim 13, Koizumi teaches a method of performing a proximity search, comprising the steps of:

(a) receiving a proximity parameter defining a first search area encompassing a predetermined position (search range) (col. 9, lines 28-39);

(b) mapping the first search area to a second search area positioned to encompass the first search area based on the proximity parameter and being defined in terms of a set of latitudes and longitudes (col. 9, lines 55-39); and

comparing the set of latitudes and longitudes to position information in a plurality of records stored in a database to determine which of the plurality of records include position information within the second search area (col. 9, lines 40-43).

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Koizumi teaches the subject matter except for mapping the first search area to second search area positioned to encompass the first search area. However, Ito teaches, "in the case where there is no registered telephone number corresponding to the entered telephone number and the east longitude and north latitude coordinates of the representative location are used to set a retrieval range, relatively wide retrieval range is set" (col. 24, lines 38-43). This teaches the longitude and the latitude is set to be widen to be included the previous searched range of longitude and latitude which does not produce the request information. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify the teaching of Ito into Koizumi because widening the search range of longitude and latitude would allow the system to retrieve more information related to the user requested.

Regarding on claim 14, Koizumi teaches the proximity parameter (range) (col. 9, lines 29-30) is a search radius defining a circular search area centered around the predetermined position, and wherein step (b) comprises mapping the circular search area to a smallest square search area into which the circular search area can fit (col. 9, lines 55-59).



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**Conclusion**

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Baoquoc N. To whose telephone number is (703) 305-1949 or via e-mail BaoquocN.To@uspto.gov. The examiner can normally be reached on Monday-Friday: 8:00 AM – 4:30 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y. Vu can be reached at (703) 305-4393.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks  
Washington, D.C. 20231.

The fax numbers for the organization where this application or proceeding is assigned are as follow:


- (703) 746-7238 [After Final Communication]
- (703) 746-7239 [Official Communication]
- (703) 746-7240 [Non-Official Communication]

Hand-delivered responses should be brought to:

Crystal Park II  
2121 Crystal Drive  
Arlington, VA 22202  
Fourth Floor (Receptionist).

Baoquoc N. To

July 12, 2003

  
SHAHID AL ALAM  
PATENT EXAMINER